REMARKS

This paper is being provided in response to the Final Office Action dated December 29, 2009, for the above-referenced application. Applicants respectfully request consideration of the following remarks.

The rejection of claims 1-7 and 9-18 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,650,892 to Thiriet (hereinafter "Thiriet") in view of U.S. Patent App. Pub. No. 2004/0029640 to Masuyama, et al. (hereinafter "Masuyama") is hereby traversed and reconsideration is respectfully requested.

Independent claim 1 recites a mobile communication terminal including first memory means and second memory means for storing data. An operating system is arranged to access data stored in said first memory means. An application execution environment is executable on said operating system and executes a platform-independent application having access to data stored in said second memory means. Detection means detects at least one of position, direction, attitude and movement of the mobile communication terminal along at least one axis of a coordinate system. Memory process means performs a memory process to store detection result data acquired based on detection results by said detection means in said first memory means, wherein the detection result data includes information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal along the at least one axis. Data transfer means transfers the detection result data stored in said first memory means to said second memory means, according to a data transfer instruction from said application execution environment, wherein said application execution environment executes

said platform-independent application using the detection result data stored in said second memory means. Claims 2, 3, 9 and 10 depend from independent claim 1.

Independent claim 4 recites a mobile communication terminal including memory means for storing data. An operating system is arranged to access data stored in said memory means. An application execution environment is executable on said operating system and executes a platform-independent application having access to data stored in said memory means. A 3-axis magnetic sensor and a 2-axis acceleration sensor are used as detection means for detecting at least one of position, direction, attitude and movement of the mobile communication terminal in connection with at least one axis of a coordinate system in accordance with a detection instruction generated by said application execution environment according to a description of said platform-independent application. Memory process means stores detection result data acquired based on detection results by said detection means in said memory means, wherein the detection results include information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal in connection with the at least one axis, wherein said application execution environment executes said platform-independent application using the detection result data stored in said memory means. Claims 9 and 10 depend from independent claim 4.

Independent claim 5 recites a mobile communication terminal including an operating system arranged to access data stored in memory means. An application execution environment is executable on said operating system and executes a platform-independent application having access to data stored in the memory means. Detection means detects at least one of position, direction, attitude and movement of said mobile communication terminal in connection with at

least one axis of a coordinate system. Data process means performs data process of assigning the detection data of said detection means to predetermined arithmetic expression for calculation and storing the calculation result data in said memory means, wherein the detection data includes information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal in connection with the at least one axis, and wherein said application execution environment executes the platform-independent application using the calculation result data stored in said memory means. Claims 8-10 depend from independent claim 5.

Independent claim 6 recites a mobile communication terminal including an operating system arranged to access data stored in memory means. An application execution environment is executable on said operating system and executes a platform-independent application having access to data stored in the memory means. Detection means detects at least one of position, direction, attitude and movement of said mobile communication terminal in connection with at least one axis of a coordinate system. Data process means performs data processes of linking mutually between detection data of said detection means or data calculated from this detection data and other data acquired by means other than said detection means, and storing the linked data in said memory means, wherein the detection data includes information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal in connection with the at least one axis, and wherein said application execution environment executes the platform-independent application using said linked data stored in said memory means. Claims 8-10 depend from independent claim 6.

Independent claim 7 recites a mobile communication terminal including an operating system arranged to use data stored in memory means. An application execution environment is executable on said operating system and executes a platform-independent application having access to data stored in the memory means. Detection means detects at least one of position, direction, attitude and movement of said mobile communication terminal in connection with at least one axis of a coordinate system. Data process means performs a data process of specifying at least two of detection data of said detection means or data calculated from the detection data, which meet predetermined conditions, and storing the specified data in said memory means, wherein the detection data includes information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal in connection with the at least one axis, and wherein said application execution environment executes the platform-independent application using said specified data stored in said memory means. Claims 8-10 depend from independent claim 7.

Independent claim 11 recites a mobile communication terminal including a first memory and a second memory for storing data. An operating system is·arranged to access data stored in the first memory. An application execution environment is executable on the operating system and executes a platform-independent application having access to data stored in the second memory. At least one sensor detects at least one of position, direction, attitude and movement of the mobile communication terminal along at least one axis of a coordinate system. A memory processor performs a memory process to store, in the first memory, detection result data determined based on detection results by the at least one sensor, wherein the detection result data includes information concerning changes to the at least one of position, direction, attitude and movement of the mobile communication terminal in connection with the at least one axis. A

data transfer device transfers the detection result data stored in the first memory to the second memory, according to a data transfer instruction from the application execution environment, wherein the application execution environment executes the platform-independent application using the detection result data stored in the second memory. Claims 12-18 depend directly or indirectly from independent claim 11.

Thiriet discloses a mobile communications apparatus adapted for executing computer game programs. A mobile apparatus includes a cellular telephone and a subscriber identification module (SIM). A game program is loaded into the memory of the SIM and is interpreted by the SIM's interpreter. The game program is then executed by the cellular telephone so that the game can be played. The Final Office Action cites principally to Figure 1, col. 2, lines 32-40 and col. 3, lines 47-62 of Thiriet. The Final Office Action (e.g., page 4) notes that Thiriet does not disclose that detection result data is stored in a first memory and does not teach detection means for detecting position, direction, attitude or movement of the mobile terminal or memory process means for storing detection result data.

Masuyama discloses a game system which is arranged to execute programs stored on removable cartridges. Masuyama describes providing motion detecting means for use in executing programs by means of a motion sensor contained in the removable cartridge. The Final Office Action (e.g., page 4) cites principally to Figure 17 and paragraphs [0099] and [0108] of Masuyama.

Applicants submit that a problem with prior art systems in the field of the presently-claimed invention is that motion sensing data is stored in software platform memory and is not

readily accessible by platform-independent applications, such as JAVA applications, which are generally only permitted to access memory reserved for the application environment. In the prior art systems, the way to import this data from the platform memory for use in an application running in the environment involves complex pre-processing of the motion data and therefore in increase in the complexity of application development. (See, for example, paragraphs [0005]-[0008] of the originally-filed specification.) For example, the game system described in Masuyama describes the execution of an application on a particular platform, not on an application execution environment (e.g., Sun Microsystem's JAVA runtime environment), executable on an operating system, that may execute platform-independent applications, as is recited by Applicants.

Specifically, Applicants' independent claim 1 recites that a mobile communication terminal includes an operating system arranged to access data stored in said first memory means and an application execution environment executable on said operating system for executing a platform-independent application, the platform-independent application having access to detection result data stored in said second memory means. The detection result data being first stored in said first memory means and then transferred to said second memory means according to a data transfer instruction from said application execution environment, whereupon, as noted above, the application execution environment executes said platform-independent application using the detection result data stored in said second memory means. Applicants refer, for example, to the discussion in the originally-filed specification on page 3, line 24 to page 4, line 24, and note that the application execution environment is recited by Applicants as a feature distinct from the operating system, on which the application execution environment is executable, and that executes a platform-independent application having access to a memory of

the mobile communication terminal, wherein said application execution environment executes said platform-independent application using detection result data stored in the memory.

The Final Office Action cites to Thiriet's disclose of a mobile communications apparatus adapted for executing computer program programs, specifically noting, at col. 2, lines 37-40, the disclosure of a Java language interpreter stored in the ROM of the SIM in Thiriet. It is particularly pointed out that the Final Office Action cites to the ROM of the SIM as akin to Applicants' recited "second memory means" and to local memory resident on the mobile station as akin to Applicants' "first memory means." The Final Office Action then cites to a processor module (PRM) of the mobile station as akin to Applicants' recited operating system and to a Java language interpreter as akin to Applicants' recited "application execution environment" with a Java game program being akin to Applicants' recited "platform-independent application."

Applicants submit that the disclosure of the read-only memory (ROM) of the SIM in Thiriet that is cited in the Final Office Action does not disclose the use of a second memory as is recited by Applicants, particularly the use of the second memory in connection with transfer of detection result data from a first memory and the use of that detection result data, stored on the second memory, in connection with execution of a platform-independent application by an application execution environment. Applicant submits that the analysis set forth, for example, on page 3 of the Final Office Action is somewhat inconsistent in discussing the use of Thiriet's ROM of the SIM and data stored thereon with respect to Applicants' recited claims. The Final Office Action refers to the game program stored on the ROM as "data stored in said second memory means." However, in response to Applicants' recited features of *said application execution environment executes said platform-independent application using the detection result*

data stored in said second memory means, the Final Office Action (bottom of page 3) cites to col. 3, lines 47-62 of Thiriet and states "detection of inputs are used to execute or play the game program stored in ROM of SIM," the Final Office Action having stated that "input commands" correspond to detection result data. This analysis, however, does not correctly correspond to Applicants' recited features. That is, the "input commands" identified by the Final Office Action are not stored on the ROM of the SIM in Thiriet and then used to execute the game program. This is particularly evident given that no input commands can be written to the ROM (read-only memory) of Thiriet. Applicant points out that the storing of the game program on Thiriet's ROM of the SIM is irrelevant to Applicants' recited features.

Moreover, the analysis becomes somewhat further attenuated since it is noted (page 4 of the Final Office Action) that Thiriet does not disclose that the detection result data (i.e. input commands as cited by the Office Action) is stored in a first memory. The Final Office Action asserts that one of ordinary skill in the art would recognize that when a key or button is pressed on a mobile phone, data associated with the key press is stored in local memory; however, such operation is not inherent to the press of a key on a mobile phone. Accordingly, notwithstanding this assertion in the Final Office Action of what one of ordinary skill in the art might conceive of concerning the first memory, the then additional steps of transferring data from a first memory to a second memory, as recited by Applicants, are then definitely not disclosed by Thiriet in the manner as is recited by Applicants. Thus, despite the assertion on page 3 of the Final Office Action that col. 3, lines 52-57 of Thiriet discloses Applicants' recited features of *data transfer means for transferring detection result data to said second memory means, according to a data transfer instruction to said application execution environment*, Applicants traverse this conclusion. The Final Office Action refers to input commands and that "data concerning input

commands are transferred to the game program;" however, Thiriet, in fact, does not disclose any transfer of "input commands" and, moreover, such input commands could not be transferred to the Thiriet's ROM that has been cited as akin to Applicants' recited second memory.

All of the above-noted arguments are in addition to what the Final Office Action has already noted as omitted from Thiriet (see, e.g., page 4 of the Final Office Action), specifically that Thiriet's disclosure has nothing to do with detection of at least one of position, direction, attitude and movement of the mobile communication terminal along at least one axis; in particular, neither the detection thereof result data nor the processing to store the detection result data in a first memory. The Final Office Action proceeds to cite to Masuyama's game system as providing for detection of an amount and direction of changes in position of a gaming unit. Applicants note the previous discussions of the deficiencies of Masuyama, with respect to Applicants' recited features, during prior prosecution of this application when Masuyama was applied as a primary reference.

Applicants respectfully submit, however, that the addition of Masuyama does not overcome the above-noted deficiencies of Thiriet with respect to Applicants' presently-recited claims. As noted above, the Final Office Action cites to Masuyama as disclosing a sensor in a gaming system to detect movement of the housing of the gaming unit and thereby used to change a state of the game. Masuyama does not disclose, nor is Masuyama cited in the Final Office Action in connection with, Applicants' recited features that are discussed with respect to Thiriet, specifically in connection with the use of a second memory and the transfer of detection result data to the second memory in the manner as recited by Applicants.. Accordingly, Applicants

respectfully submit that Thiriet and Masuyama, taken alone or in combination, do not teach or fairly suggest at least the above-noted features as recited by Applicants.

Similar features as those discussed above specifically with respect to independent claim 1 are recited in the other independent claims, and the claims depending therefrom, and accordingly, the above-noted remarks may also be applied to those claims.

Accordingly, Applicants respectfully submit that Thiriet and Masuyama, taken alone or in combination, do not teach or fairly suggest at least the above-noted features as are recited by Applicants. In view of the above, Applicants respectfully request that the rejection be reconsidered and withdrawn.

The rejection of claim 8 under 35 U.S.C. 103(a) as being unpatentable over Thiriet in view of Masuyama and further in view of U.S. Patent No. 7,175,529 to Hartman (hereinafter "Hartman") is hereby traversed and reconsideration is respectfully requested.
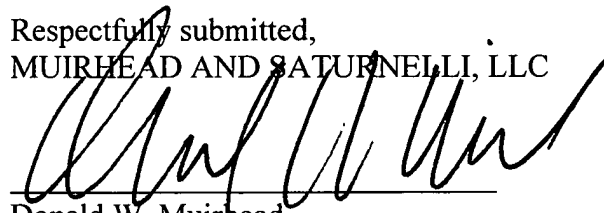
The features of Applicants' independent claims are discussed above in connection with Thiriet and Masuyama. Claim 8 depends therefrom.

Hartman discloses a method and apparatus for an RF transmitter layout in a gaming hall. The Final Office Action cites to Hartman as disclosing a radio communication means for communicating by wireless communication utilizing radio waves, citing specifically to col. 5, lines 52-67 and col. 6, lines 26-45 of Hartman.

Applicants respectfully submit that the Hartman reference does not overcome the above-noted deficiencies of Thiriet and Masuyama with respect to Applicants' presently-claimed invention. Hartman does not disclose, nor is Hartman cited in the Final Office Action in connection with, Applicants' recited features that are discussed above with respect to Thiriet and Masuyama. Accordingly, Applicants respectfully submit that Thiriet, Masuyama and Hartman, taken alone or in any combination, do not teach or fairly suggest at least the above-noted features as claimed by Applicants. In view of the above, Applicants respectfully request that the rejection be reconsidered and withdrawn.

Based on the above, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 508-898-8603.

Respectfully submitted,
MUIRHEAD AND SATURNELLI, LLC

Date: March 15, 2010

Donald W. Muirhead
Registration No. 33,978

Muirhead and Saturnelli, LLC
200 Friberg Parkway, Suite 1001
Westborough, MA 01581
Phone: (508) 898-8601
Fax: (508) 898-8602